

Table 2. Results from separate linear mixed-effects models predicting the number of times children looked at the speaker during the label, slide, planning, and response phases in Experiment 1. Parentheticals indicate the reference level for dummy-coded variables.

Phase	Predictor	Estimate	Std. Error	<i>t</i> value	<i>p</i> value	
Label	Intercept	1.40	0.06	22.70	< .001	***
	Num objs (2)	-0.07	0.06	-1.14	0.25	
	Fam (N)	0.06	0.06	0.90	0.37	
	Age	0.01	0.00	1.88	0.06	.
	Num objs (2) * Fam (N)	-0.07	0.09	-0.78	0.43	
	Num objs (2) * Age	-0.01	0.00	-1.37	0.17	
	Fam (N) * Age	-0.01	0.00	-1.10	0.27	
	Num objs (2) * Fam (N) * Age	-0.00	0.01	-0.49	0.63	
Slide	Intercept	0.12	0.02	5.00	< .001	***
	Num objs (2)	0.02	0.03	0.54	0.59	
	Fam (N)	0.04	0.03	1.38	0.17	
	Age	-0.00	0.00	-0.44	0.66	
	Num objs (2) * Fam (N)	-0.07	0.04	-1.69	0.09	.
	Num objs (2) * Age	0.00	0.00	0.21	0.83	
	Fam (N) * Age	-0.00	0.00	-0.19	0.85	
	Num objs (2) * Fam (N) * Age	-0.00	0.00	-0.82	0.41	
Planning	Intercept	0.04	0.02	1.48	0.14	
	Num objs (2)	0.01	0.04	0.16	0.87	
	Fam (N)	0.00	0.03	0.11	0.91	
	Age	-0.00	0.00	-0.95	0.34	
	Num objs (2) * Fam (N)	0.21	0.05	4.37	< .001	***
	Num objs (2) * Age	0.00	0.00	0.54	0.59	
	Fam (N) * Age	0.00	0.00	0.73	0.47	
	Num objs (2) * Fam (N) * Age	0.01	0.00	1.40	0.16	
Response	Intercept	0.22	0.04	5.16	< .001	***
	Num objs (2)	0.06	0.06	0.96	0.34	
	Fam (N)	0.02	0.05	0.34	0.73	
	Age	-0.00	0.00	-0.22	0.83	
	Num objs (2) * Fam (N)	0.60	0.08	7.97	< .001	***
	Num objs (2) * Age	0.00	0.00	0.81	0.42	
	Fam (N) * Age	0.00	0.00	0.59	0.55	
	Num objs (2) * Fam (N) * Age	0.01	0.01	1.24	0.22	

Table S1. *Results from separate logistic mixed-effects models predicting whether or not children looked at the speaker during the label, slide, planning, and response phases in Experiment 1. Parentheticals indicate the reference level for dummy-coded variables. Note that models with interaction terms for age did not converge.*

Phase	Predictor	Estimate	Std. Error	<i>z</i> value	<i>p</i> value	
Label	Intercept	2.74	0.30	9.02	< .001	***
	Num objs (2)	-0.42	0.31	-1.33	0.18	
	Fam (N)	0.52	0.36	1.45	0.15	
	Age	-0.01	0.01	-0.77	0.44	
	Num objs (2) * Fam (N)	-0.53	0.47	-1.13	0.26	
Slide	Intercept	-2.32	0.25	-9.31	< .001	***
	Num objs (2)	0.17	0.29	0.58	0.56	
	Fam (N)	0.43	0.28	1.51	0.13	
	Age	-0.02	0.01	-1.34	0.18	
	Num objs (2) * Fam (N)	-0.74	0.41	-1.80	0.07	.
Planning	Intercept	-3.86	0.44	-8.72	< .001	***
	Num objs (2)	0.17	0.51	0.33	0.74	
	Fam (N)	0.08	0.51	0.16	0.88	
	Age	0.01	0.02	0.56	0.58	
	Num objs (2) * Fam (N)	1.65	0.65	2.52	0.01	*
Response	Intercept	-1.77	0.22	-7.93	< .001	***
	Num objs (2)	0.48	0.25	1.96	0.05	.
	Fam (N)	-0.09	0.26	-0.35	0.73	
	Age	0.02	0.01	2.01	0.04	*
	Num objs (2) * Fam (N)	1.90	0.35	5.42	< .001	***

Table 3. Results from separate linear mixed-effects models predicting the number of times children looked at the speaker during the label, slide, planning, and response phases in Experiment 2. Parentheticals indicate the reference level for dummy-coded variables.

Phase	Predictor	Estimate	Std. Error	<i>t</i> value	<i>p</i> value	
Label	Intercept	1.44	0.09	15.64	< .001	***
	Trial Type (FF)	0.07	0.08	0.93	0.35	
	Trial Type (NN)	0.02	0.08	0.28	0.78	
	Age	0.03	0.01	1.97	0.05	.
	Gaze (Gaze)	-0.04	0.13	-0.29	0.77	
	Trial Type (FF) * Age	-0.00	0.01	-0.19	0.85	
	Trial Type (NN) * Age	-0.01	0.01	-1.16	0.25	
	Trial Type (FF) * Gaze (Gaze)	-0.03	0.11	-0.31	0.75	
	Trial Type (NN) * Gaze (Gaze)	0.00	0.11	0.03	0.97	
	Age * Gaze (Gaze)	-0.02	0.02	-1.16	0.25	
	Trial Type (FF) * Gaze (Gaze) * Age	0.00	0.02	0.11	0.91	
	Trial Type (NN) * Gaze (Gaze) * Age	0.02	0.02	1.26	0.21	
Slide	Intercept	0.05	0.03	1.82	0.07	.
	Trial Type (FF)	0.09	0.03	2.68	0.01	**
	Trial Type (NN)	0.07	0.03	1.99	0.05	*
	Age	-0.01	0.00	-1.51	0.13	
	Gaze (Gaze)	0.08	0.04	1.84	0.07	.
	Trial Type (FF) * Age	0.01	0.01	1.69	0.09	.
	Trial Type (NN) * Age	0.00	0.01	0.15	0.88	
	Trial Type (FF) * Gaze (Gaze)	-0.08	0.05	-1.67	0.1	.
	Trial Type (NN) * Gaze (Gaze)	-0.09	0.05	-1.83	0.07	.
	Age * Gaze (Gaze)	0.00	0.01	0.51	0.61	
	Trial Type (FF) * Gaze (Gaze) * Age	-0.01	0.01	-1.00	0.32	
	Trial Type (NN) * Gaze (Gaze) * Age	0.00	0.01	0.14	0.89	
Planning	Intercept	0.14	0.05	3.02	0	**
	Trial Type (FF)	-0.11	0.06	-2.00	0.05	*
	Trial Type (NN)	0.15	0.06	2.71	0.01	**
	Age	-0.01	0.01	-1.49	0.14	
	Gaze (Gaze)	-0.12	0.07	-1.77	0.08	.
	Trial Type (FF) * Age	0.01	0.01	1.15	0.25	
	Trial Type (NN) * Age	0.01	0.01	1.64	0.1	
	Trial Type (FF) * Gaze (Gaze)	0.11	0.08	1.43	0.15	
	Trial Type (NN) * Gaze (Gaze)	-0.13	0.08	-1.67	0.1	.
	Age * Gaze (Gaze)	0.01	0.01	0.84	0.4	
	Trial Type (FF) * Gaze (Gaze) * Age	-0.01	0.01	-0.49	0.63	
	Trial Type (NN) * Gaze (Gaze) * Age	-0.01	0.01	-0.96	0.34	
Response	Intercept	0.68	0.09	7.75	< .001	***
	Trial Type (FF)	-0.43	0.09	-4.68	< .001	***
	Trial Type (NN)	0.22	0.09	2.42	0.02	*
	Age	0.01	0.01	0.77	0.44	
	Gaze (Gaze)	-0.28	0.12	-2.25	0.03	*
	Trial Type (FF) * Age	-0.01	0.01	-0.66	0.51	
	Trial Type (NN) * Age	0.01	0.02	0.43	0.67	
	Trial Type (FF) * Gaze (Gaze)	0.34	0.13	2.66	0.01	**
	Trial Type (NN) * Gaze (Gaze)	0.20	0.13	1.57	0.12	
	Age * Gaze (Gaze)	-0.04	0.02	-1.93	0.05	.
	Trial Type (FF) * Gaze (Gaze) * Age	0.03	0.02	1.49	0.14	
	Trial Type (NN) * Gaze (Gaze) * Age	-0.01	0.02	-0.40	0.69	

Table S2. Results from separate logistic mixed-effects models predicting whether or not children looked at the speaker during the label, slide, planning, and response phases in Experiment 2. Parentheticals indicate the reference level for dummy-coded variables. Note that models with interaction terms for age did not converge.

Phase	Predictor	Estimate	Std. Error	z value		stars
Label	Intercept	3.10	0.47	6.67	< .001	***
	Trial Type (FF)	-0.14	0.41	-0.34	0.73	
	Trial Type (NN)	0.32	0.44	0.73	0.47	
	Gaze (Gaze)	-0.17	0.60	-0.29	0.77	
	Age	0.07	0.04	1.70	0.09	.
	Trial Type (FF) * Gaze (Gaze)	0.00	0.57	0.00	1	
	Trial Type (NN) * Gaze (Gaze)	-0.19	0.59	-0.33	0.74	
Slide	Intercept	-3.37	0.43	-7.81	< .001	***
	Trial Type (FF)	1.27	0.44	2.86	0	**
	Trial Type (NN)	1.01	0.45	2.23	0.03	*
	Gaze (Gaze)	1.10	0.51	2.14	0.03	*
	Age	-0.03	0.03	-1.21	0.23	
	Trial Type (FF) * Gaze (Gaze)	-1.17	0.57	-2.08	0.04	*
	Trial Type (NN) * Gaze (Gaze)	-1.31	0.59	-2.23	0.03	*
Planning	Intercept	-3.01	0.43	-6.93	< .001	***
	Trial Type (FF)	-1.24	0.57	-2.19	0.03	*
	Trial Type (NN)	0.91	0.39	2.34	0.02	*
	Gaze (Gaze)	-1.31	0.69	-1.90	0.06	.
	Age	-0.00	0.04	-0.02	0.99	
	Trial Type (FF) * Gaze (Gaze)	1.22	0.92	1.32	0.19	
	Trial Type (NN) * Gaze (Gaze)	-0.33	0.76	-0.43	0.67	
Response	Intercept	0.25	0.24	1.04	0.3	
	Trial Type (FF)	-1.76	0.28	-6.25	< .001	***
	Trial Type (NN)	0.34	0.26	1.34	0.18	
	Gaze (Gaze)	-1.37	0.35	-3.87	< .001	***
	Age	0.00	0.02	0.04	0.97	
	Trial Type (FF) * Gaze (Gaze)	1.66	0.39	4.21	< .001	***
	Trial Type (NN) * Gaze (Gaze)	0.61	0.37	1.66	0.1	.